



UNITED STATES DEPARTMENT OF
COMMERCE
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TRADEMARKS

Washington, D.C. 20231

MEMORANDUM

DATE : August 10, 1995
TO : Board of Interference
FROM : Johann Richter, SPE 1201
SUBJECT: Initial Interference Memo re Appl.
SN 08/162,984

Count 1 is directed to a Markush claim consisting of final products. It is therefore patentably distinct from count 3 which is directed to intermediate compounds used in preparing the final products.

Count 2, which is drawn to a species, is patentably distinct from count 1 because although embraced by the broad genus of count 1, applicants have provided data which demonstrates unexpected results, and hence, unobviousness over the broad genus of count 1. See the Declar

4-27-95.

Exhibit 4
CHEN, ET AL.
Interference No. 103,675

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Count 1 is directed to a Markush claim consisting of final products. It is therefore patentably distinct from count 3 which is directed to intermediate compounds used in preparing the final products.

Count 2, which is drawn to a species, is patentably distinct from count 1 because although embraced by the broad genus of count 1, applicants have provided data which demonstrates unexpected results, and hence, unobviousness over the broad genus of count 1. See the Declaration by Dr. Lavelle filed 4-27-95.

1
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johann Richter whose telephone number is (703) 308-4532.

RICHTER:bah
August 10, 1995

INTERFERENCE—INITIAL MEMORANDUM

EXAMINERS INSTRUCTIONS—This form need not be typewritten. Complete the items below and forward to the Group Clerk with all files including those benefit of which has been accorded. The parties need not be listed in any specific order. Use a separate form for each count.

BOARD OF PATENT APPEALS AND INTERFERENCES. An interference is found to exist between the following cases:

This is count 2 of 3 count(s).

1. NAME <u>BUCHARD et al.</u>	SERIAL NO <u>08/162984</u>	FILING DATE <u>Dec. 8, 1993</u>	PATENT NO. IF ANY
The claims of this party which correspond to this count are <u>(142) (allowable)</u>		The claims of this party which do not correspond to this count are <u>5, 13, 24, 54, 62, 73, 103-139 (NC)</u> <u>140, 141 (allowable)</u>	

* Accorded benefit of COUNTRY <u>France</u>	SERIAL NO <u>92 14913</u>	FILING DATE <u>Dec. 9, 1992</u>	PATENT NO. IF ANY

2. NAME <u>CHEN et al.</u>	SERIAL NO <u>08/029819</u>	FILING DATE <u>Mar. 11, 1993</u>	PATENT NO. IF ANY <u>5, 254586</u>
The claims of this party which correspond to this count are <u>(7), 8, 9</u>		The claims of this party which do not correspond to this count are <u>1-6, 10, 11</u>	

* Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY

3. NAME	SERIAL NO	FILING DATE	PATENT NO. IF ANY
The claims of this party which correspond to this count are		The claims of this party which do not correspond to this count are	

* Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY

If a claim of any party is exactly the same as this count, it should be circled above. If not, type the count in this space (attach additional sheet if necessary)

See pg 13 of paper #24

The serial number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient to merely list the earliest application if there are intervening applications necessary for continuity.

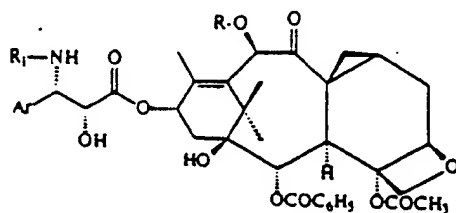
DATE <u>8-8-95</u>	PRIMARY EXAMINER <u>JOHANN RICHTER</u>	TELEPHONE NO <u>308-4532</u>	ART. NO. <u>1201</u>
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Proposed generic count and claims designated as corresponding thereto

Count 1

A taxoid of the formula:



in which

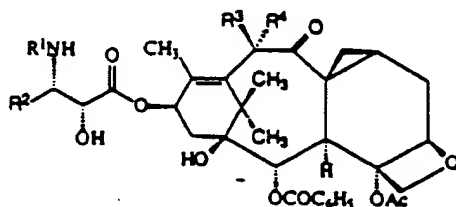
R represents hydrogen or acetyl,

R₁ represents benzoyl or R₂-O-CO- in which R₂ represents t-butyl, and

Ar represents phenyl or α - or β -naphthyl, said phenyl or naphthyl being unsubstituted or substituted by C₁₋₄ alkyl, C₁₋₄ alkoxy, halogen, or CF₃, or Ar represents 2- or 3-thienyl or 2- or 3-furyl, said thienyl or furyl being unsubstituted or substituted by halogen,

OR

A compound of the formula



in which

R¹ is -COR² in which R² is t-butyloxy, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, or phenyl, optionally substituted with one to three same or different C₁₋₆ alkyl, C₁₋₆ alkoxy, halogen or -CF₃ groups;

R² is C₁₋₆ alkyl, C₁₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₆ cycloalkyl, or a radical of the formula -W-R³ in which W is a bond, C₂₋₆ alkenediyl, or -(CH₂)_i-, in which i is one to six; and R³ is naphthyl, furyl, thienyl or phenyl, and furthermore R³ can be optionally substituted with one to three same or different C₁₋₆ alkyl, C₁₋₆ alkoxy, halogen or -CF₃ groups; and

R³ is OCOR, -OCOOR, H, or OH; R⁴ is hydrogen; or R³ and R⁴ jointly form a carbonyl group; and R is C₁₋₆ alkyl.

INTERFERENCE—INITIAL MEMORANDUM

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BOARD OF PATENT APPEALS AND INTERFERENCES: An Interference is found to exist between the following cases:

This is count 1 of 3 count(s).

NAME <u>BOUCHARD et al.</u>	SERIAL NO <u>081162984</u>	FILING DATE <u>Dec. 8, 1993</u>	PATENT NO. IF ANY
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The claims of this party which correspond to this count are

(140) (allowable)

The claims of this party which do not correspond to this count are

5, 13, 24, 54, 62, 73, 103-139, 141-142 (allowable)

Accorded benefit of COUNTRY <u>France</u>	SERIAL NO <u>92 14813</u>	FILING DATE <u>Dec. 9, 1992</u>	PATENT NO. IF ANY
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NAME <u>CHEN et al.</u>	SERIAL NO <u>081027819</u>	FILING DATE <u>Mar. 11, 1993</u>	PATENT NO. IF ANY <u>5,254,580</u>
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The claims of this party which correspond to this count are

1-6, 8, 9

The claims of this party which do not correspond to this count are

7, 10, 11

Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY
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NAME	SERIAL NO	FILING DATE	PATENT NO. IF ANY
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The claims of this party which correspond to this count are

The claims of this party which do not correspond to this count are

Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY
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If a claim of any party is exactly the same as this count, it should be circled above. If not, type the count in this space (attach additional sheet if necessary)

See pg. 10 of paper #24

* The serial number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient to merely list the earliest application if there are intervening applications necessary for continuity.

DATE <u>8-8-95</u>	PRIMARY EXAMINER <u>JOHANN RICHTER</u>	TELEPHONE NO <u>308-4522</u>	EXTENSION <u>1201</u>
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In sum, RPR claim 142 and BMS claim 7 define the same compound and thus define the same invention. The PTO has already issued BMS patent claim 7; RPR claim 142 must, therefore, be allowable. Species Count 2 links RPR claim 142 and BMS claim 7 by "OR" as follows:

Proposed species count and claims designated as corresponding thereto

Count 2

4 α -10 β -diacetoxy-2 α -benzoyloxy-5 β ,20-epoxy-1 β -hydroxy-7 β ,8 β -methylene-9-oxo-19-nor-11-taxen-13 α -yl(2R,3S)-3-tert-butoxycarbonylamino-2-hydroxy-3-phenylpropionate

OR

N-debenzoyl-N-t-butoxycarbonyl-7-deoxy-8-desmethyl-7,8-cyclopropataxol.

RPR claim 142 and BMS claims 7, 8 (to extent it depends on claim 7), and 9 (to the extent it depends from claim 7) should be designated in Form PTO-850 as corresponding to species Count 2.

3. **RPR claim 141 is patentable and interfering with BMS claim 10**

Claim 141 of the present application and claims 10 and 11 of the BMS patent define the same patentable invention directed to intermediate compounds. Claim 141 was rewritten from cancelled claim 101, and, as Exhibit E shows, claims the same subject matter as the cancelled claim. The RPR specification, moreover, fully supports claim 141, as shown in Table 4:

103675

FORM PTO 850 REV. 3-86		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	
INTERFERENCE—INITIAL MEMORANDUM			
EXAMINERS INSTRUCTIONS—This form need not be typewritten. Complete the items below and forward to the Group Clerk with all files including those benefit of which has been accorded. The parties need not be listed in any specific order. Use a separate form for each count.			
BOARD OF PATENT APPEALS AND INTERFERENCES: An interference is found to exist between the following cases:			
This is count <u>3</u> of <u>3</u> count(s).			
1. NAME <u>BOUCHARD et al.</u>	SERIAL NO. <u>08/162984</u>	FILING DATE <u>Dec. 8, 1993</u>	PATENT NO. IF ANY
The claims of this party which correspond to this count are <u>(141) (allowable)</u>		The claims of this party which do not correspond to this count are <u>5, 13, 24, 54, 62, 73, 103-139 (Not allowable)</u> <u>140, 142 (allowable)</u>	
* Accorded benefit of COUNTRY <u>France</u>	SERIAL NO. <u>92 14813</u>	FILING DATE <u>Dec. 9, 1992</u>	PATENT NO. IF ANY
2. NAME <u>CHEN et al.</u>			
The claims of this party which correspond to this count are <u>(10), 11</u>		The claims of this party which do not correspond to this count are <u>1-9</u>	
* Accorded benefit of COUNTRY	SERIAL NO.	FILING DATE	PATENT NO. IF ANY
3. NAME			
The claims of this party which correspond to this count are		The claims of this party which do not correspond to this count are	
* Accorded benefit of COUNTRY	SERIAL NO.	FILING DATE	PATENT NO. IF ANY
If a claim of any party is exactly the same as this count, it should be circled above. If not, type the count in this space (attach additional sheet if necessary)			
See 13, 15 of paper # 24			
OCT 12 1995			

The serial number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient merely to list the earliest application if there are intervening applications necessary for continuity.

DATE <u>Oct 12</u>	PRIMARY EXAMINER <u>THOMAS G. CUTLER</u>	TELEPHONE NO. <u>202-4572</u>	ART. NO. <u>120</u>
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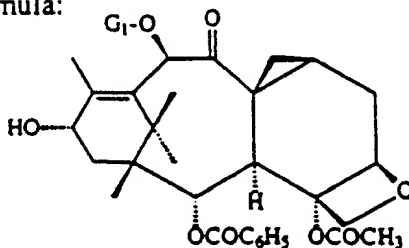
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Specifically, RPR claim 141 falls completely within the scope of Claim 10 of the BMS patent and defines the same invention. Because BMS patent claim 10 has issued, narrower RPR claim 141 must be allowable. Intermediate Count 3 links RPR claim 141 with BMS claim 10 as follows:

Proposed intermediate count and claims designated as corresponding thereto

Count 3

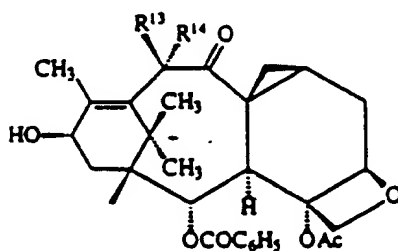
A taxoid of the formula:



in which G_1 represents hydrogen or acetyl,

OR

A compound of the formula:



in which R^{13} is hydrogen, acetyloxy or hydroxy; R^{14} is hydrogen; or R^{13} and R^{14} jointly form a carbonyl group.

RPR claim 141 and claims 10 and 11 from the BMS patent should be designated in Form PTO-850 as corresponding to intermediate Count 3.